

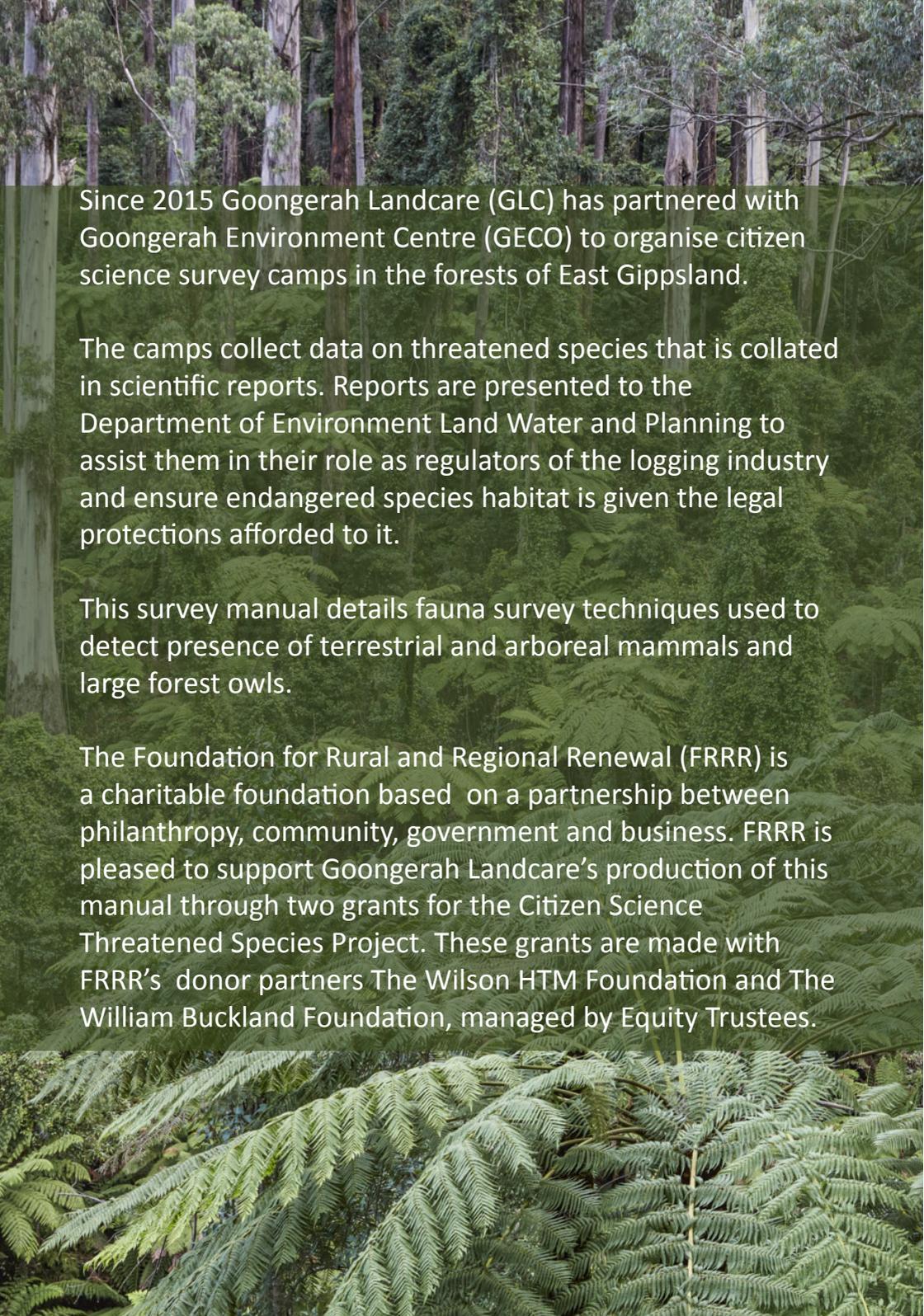
# East Gippsland's Forests Fauna Survey Manual



**GECO**  
GOONGERAH  
ENVIRONMENT CENTRE



**LANDCARE**  
GOONGERAH

A lush green forest with tall trees and dense ferns. The background shows tall, thin trees with light-colored bark, possibly eucalyptus, rising above a thick canopy of green ferns. The foreground is dominated by large, vibrant green fern fronds, some showing signs of being eaten or damaged.

Since 2015 Goongerah Landcare (GLC) has partnered with Goongerah Environment Centre (GECO) to organise citizen science survey camps in the forests of East Gippsland.

The camps collect data on threatened species that is collated in scientific reports. Reports are presented to the Department of Environment Land Water and Planning to assist them in their role as regulators of the logging industry and ensure endangered species habitat is given the legal protections afforded to it.

This survey manual details fauna survey techniques used to detect presence of terrestrial and arboreal mammals and large forest owls.

The Foundation for Rural and Regional Renewal (FRRR) is a charitable foundation based on a partnership between philanthropy, community, government and business. FRRR is pleased to support Goongerah Landcare's production of this manual through two grants for the Citizen Science Threatened Species Project. These grants are made with FRRR's donor partners The Wilson HTM Foundation and The William Buckland Foundation, managed by Equity Trustees.

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## Remote Cameras

One of the most effective methods of fauna surveying is use of remote fauna cameras. Remote cameras, also known as “camera traps” are an efficient way to collect data over an extended period of time, with minimal labour and minimal stress to animals.

Remote, motion sensing cameras are widely used for detecting the presence of a range of fauna species. There are a number of different camera types available. GECO and GLC currently use Reconnyx cameras.

These are robust, easy to use, and can produce high quality images.

The bulk of GECO’s remote camera work has focused on detection of the long-footed potoroo.

Since 2004 our remote cameras have captured many types of animals, and on some occasions created rarely or never before seen images and video.

*Photo (Ed Hill): Deploying Reconnyx fauna camera in threatened forest of the Cottonwood range.*

## Equipment list for mammal surveys

- Remote camera complete with batteries, and mounting hardware
- SD card (at least 4 GB)
- Handheld GPS and spare batteries
- Compass
- Compact camera (must accept and read the SD card from the remote camera)
- Data sheet or notebook for recording camera location, settings, and misc info
- Mammal bait (see below), and bait holder
- Tie wire
- Pliers or Multi-tool
- Wooden, plastic, or metal bait pole
- Mallet
- Secateurs

## Procedure for mammal surveys

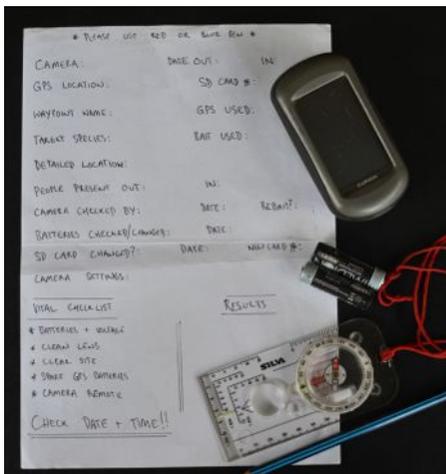
The steps described below are appropriate for the survey of medium sized animals, for example: bandicoots, potoroos, wallabies, possums and quolls.

### Step 1: Bait

Selection of a suitable bait or scent lure will greatly increase the chance of detecting target species. Our survey program directly targets two species; Long Footed Potoroo (a fungivore) and Spot-tailed Quoll (a carnivore), both species are listed as Endangered.

**Long-footed potoroos** preferred food is truffles, an underground fungus. The standard bait used to attract potoroos to cameras site is a mixture of peanut butter, oats and honey.

These ingredients are combined into a mix that is rolled into balls and placed into tea strainers or another suitable receptacle that will hold the bait but release the smell through holes or mesh.



*Photo: Essential record keeping equipment: GPS, spare batteries, compass, data sheet and pencil.*



When available truffle oil can be added to the mix, it is expensive but has been proven to be effective. The tea strainers are placed into a wire cage or suspended from trees or shrubs with string above the camera site.

When establishing bait stations it is essential to ensure that animals will not be able to access the bait. Remote camera surveying is a passive survey technique that aims to collect information with minimal interference with animals' natural behavior.

Selecting a secure cage or receptacle to place the bait in will ensure the survey is as passive as possible.

*Photos: (above) A bait station in the making. Oats, honey, truffle oil, peanut butter, tea eggs and wire cage (note the plastic cover on the wire cage to keep bait dry in the field); (below) A long footed potoroo attracted to bait station in the Kuark forest.*

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GECO RX03

RECONYX

**Carnivores like the spot-tailed quoll** are attracted to strong smelling animal protein based baits. Use of tinned fish like tuna or cooked chicken has successfully attracted this species to camera sites. A tin of tuna can be opened and left inside a wire cage mounted to a star picket or post.

Alternatively tuna oil concentrate can be poured onto cotton wool and placed inside tea strainers or other receptacles with holes for the smell to permeate through.

Don't hold back on making your quoll bait stink, quolls love stinky meat. It's possible to combine tuna oil and tinned fish for an extra special stink.

When targeting Quolls it's important to ensure the baits are secured inside a strong receptacle. The receptacle should not have any associated hazards such as sharp edges or any other feature that may cause harm to a Quoll if it were to come into contact with it.

*Photos: (from top to bottom) spot-tailed quoll; pouring tuna oil onto cotton buds; a steel bait cage with tinned tuna.*



## Step 2: Site selection

Site selection is primarily informed by the target species.

What type of shelter habitat does the target species prefer? Where/ what do they eat? Do they have territorial or display areas?

Potoroos and other medium sized species require dense undergrowth to shelter in during the day, for instance a complex of bracken, wire-grass, and ghania. More exposed areas may also be used, providing there is sufficient low shrub or mid-storey canopy cover. Dense regrowth thickets, or clumps of young saplings can also provide good shelter.



An open area adjacent to some good shelter habitat can be a good camera location.

For identification of medium sized mammals such as potoroos or bandicoots, a relatively unobstructed area of around 2-3 square metres is sufficient. This is a rough guide. Dense forest, steep terrain, thick undergrowth, or a combination of all three, will complicate and constrain camera placement, just do your best!

## Step 3: Camera placement

Several factors should inform camera placement:

### 1. Point the camera south.

Positioning the camera in a direction range between east-south-east and west-south-west, will limit false triggers of the camera due to sun glare, and the movement of harsh shadows. If you have no choice but to point the camera to the north, try to choose a position under dense canopy.

*Photo (Ed Hill): Bait station in foreground, camera deployment in background.*



*Photo (Ed Hill): Remote Camera Site Selection.*

*1. South facing camera site sloping downhill. 2. Large tree behind bait as recognisable background, distinctive looking rocks and logs are also good. 3. Solid tree to position camera to. 4. Open and clear view towards bait.*

**2. Be aware of animal trails in the forest.** Trails can sometimes assist camera placement, as they often give a flatish, open (relatively), area along a contour. However, it is worth noting that large animal trails often mean larger animals use them, this increases the risk of interference with the camera or bait.

### **3. Tree selection is important.**

Very small trees can make mounting the camera difficult, as can very large trees. Trees with lots of irregularities, lumps, bumps, burls, low branches, thick or rough bark, or low twists or bends, also make camera mounting challenging. Watch out for trees that may be easily affected by wind as they may move and falsely trigger the camera. Look out for hanging dead branches. Watch out for dead trees, you don't want to return to find your camera facing the ground!

**4. Be aware of sloping terrain.** If the camera is to face up or downhill from your selected tree, this can significantly affect the angle it is mounted at. Slope also affects the field of view, and the range of the sensors. To get the most effective camera angle it is important to orient the camera to match the slope.

**5. Any threatened species records may need to be verified by the relevant government Department of the Environment.** In the past GECO and Goongerah Landcare has been asked to position our remote cameras to include a recognisable background. This could be

a large tree, stump, rock, log, or any easily identifiable feature. It is important to take set up photos of your site in case you need to return to verify it with a department worker.

(It may be possible to identify some smaller animals such as bush rat or *Antechinus* species using the described setup, however a modified setup will be required to provide accurate identification for small mammal targeted surveys.)

*Photo: A Wombat detected on camera four weeks after deployment. Note the ferns that have grown up after being trimmed with secateurs during deployment.*



#### Step 4: Camera and bait positioning

Select an appropriate tree and attach the camera to it. For medium mammals, a camera height of 40 to 50 cm is adequate.

Position the bait post approximately 2.5 metres from the camera. Attach the bait holder to the post at a height of around 50 to 60cm. Wire or cable ties are ideal for this. If you do use cable ties, double up, as rats are known to chew through plastic!

A clear area between the camera and the bait and around the bait post is essential. Clear about 2 square metres around the bait.

Where possible, remove vegetation and fallen debris such as sticks and rocks within this area. Use secateurs to remove any vegetation that may cause the camera to trigger or obscure the camera's view. This may include branches hanging in the background or at the sides.

Remote cameras have excellent sensitivity and even the smallest grass head blowing in the wind can cause a multitude of false triggers.

Also be aware of anything that may drop in front of, or onto the camera from the tree trunk above, or from lower branches. Removing loose bark (especially ribbon bark) hanging above the camera is always a good idea.

Position the camera so that it points directly at the bait post.

Open the camera, make sure you have inserted a blank SD card, and turn it on. Reconyx cameras have a feature called "walk-test". The "walk-test" feature activates a red LED on the front of the camera when the sensors detect a temperature differential. This allows the user to find an optimum position for camera.

Set the camera to "walk-test" in the main menu. Close the camera door. Move around in front of and behind the bait, check the sensor LED and find where the camera is and is not activated.

Think about the size of your target animal, get down on the ground and use your hands to activate the LED sensors. Reposition the camera and repeat until the best position is found.



Sensor field

*Photo: Activating the sensors on a Reconyx camera to test for correct deployment positioning of the camera.*

For good results the camera sensor LED should activate at least 1 metre in front of the bait post, and should also activate when there is motion behind the post.

Once you are satisfied with the camera position, “arm” the camera and close the door. The LED will flash for 10 seconds prior to arming. Move around in the activation zone, do this a few times to ensure the camera is working.

Open the camera, press “OK”, wait till the card has been accessed, and then turn the camera off. Remove the SD card and check your set up photos using a compact camera.

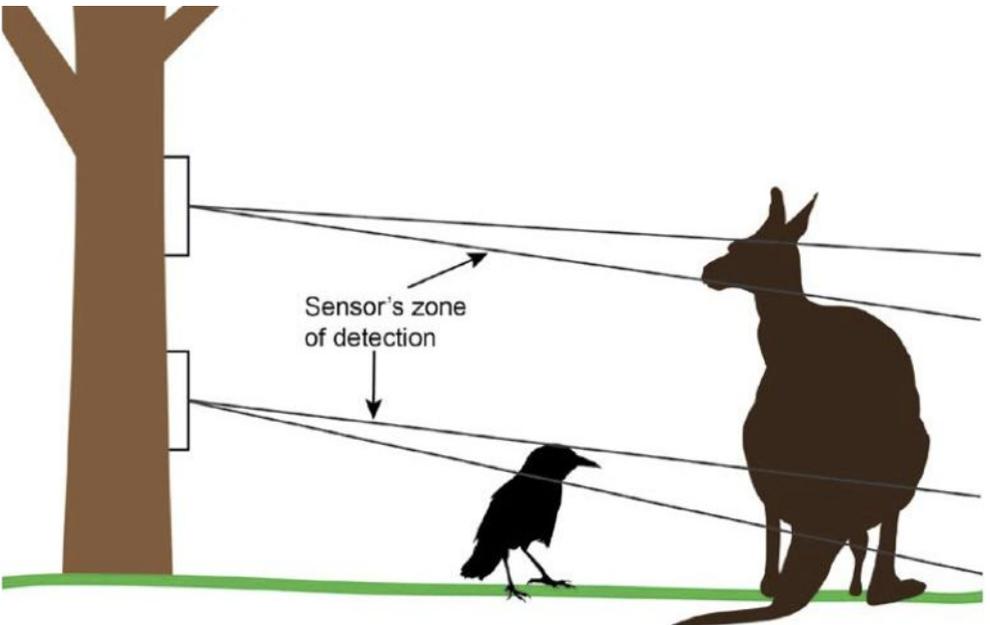
If you have filled in a data sheet or notebook, it can be a good idea to take a photo of it before returning the SD card to the remote camera.

It can also be of use to take several photos of your setup and the general site. This helps to identify where the camera was and the information on the data sheet may

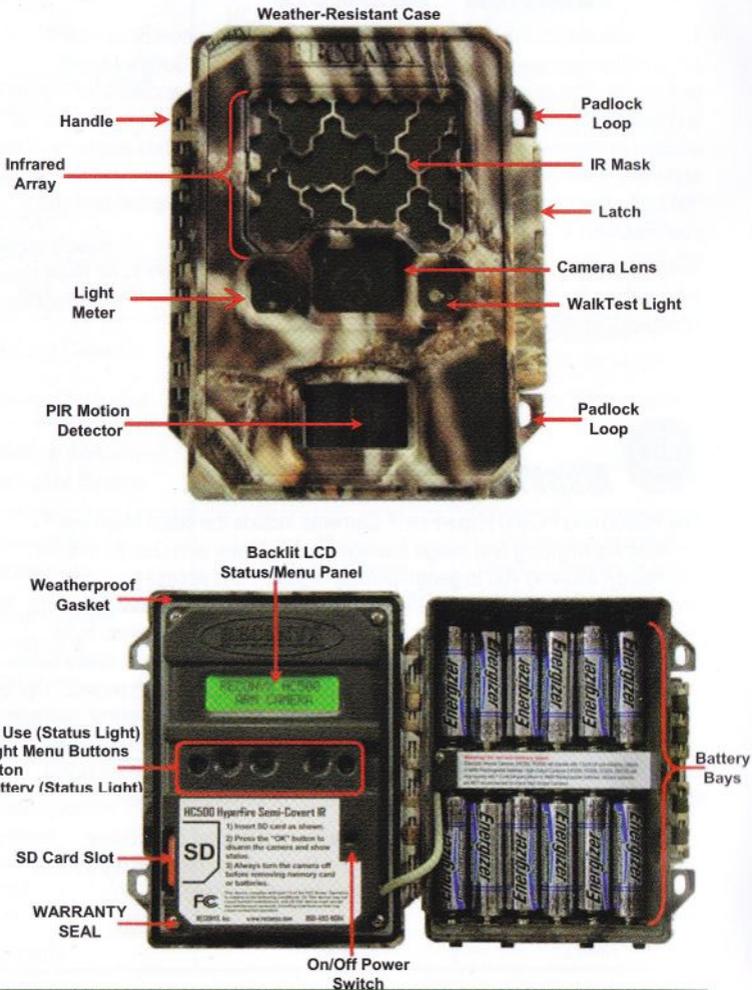
be critical later, so it's good for it to remain with the remote camera images. It also acts as a backup in case something happens to your datasheet.

*Photos: (above right) Reviewing set up shot using a compact camera; (below left) set up test shot from Reconyx camera; (below right) Camera placement in open area (right and front) adjacent to good shelter habitat (behind).*

*Diagram (below) showing camera sensor zone of detection and camera placement to target different sized species.*



## HyperFire™ Controls & Parts Diagram



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Photo above: Reconyx HyperFire camera controls diagram

Photos opposite page (Rob Blakers):  
Kuark forest (above), Errinundra Plateau (below)





## Spotlighting and Call-playback

Active survey for nocturnal animals has proven to be an effective tool not only for determining presence of threatened species, but for securing protected forest areas.

Surveys by spotlight or call-playback, or a combination of both have been used by volunteers for many years, often with the result of stopping logging operations and the creation of new protected areas.

### What is Call-playback?

Call-playback is a survey technique used to elicit an aural response from nocturnal animals, usually owls however the technique is also used to survey for yellow-bellied gliders.

Call-playback is most commonly used to detect presence of large forest owls such as the powerful, masked and sooty owls.

*Photo (Raphael Korman): Spotlighting in threatened forest of the Cottonwood range.*

The chance of detecting owls at a site where they are present may be quite low. Owls occupy very large home ranges and are likely to make some use of almost every part of the forest within their range. This means a call play back survey may be carried out in a part of their range that they are not present in at the time of the survey and therefore not record their presence.



Call-play back for large forest owls can be carried out for multiple species in the one survey. A sound recording device is used to record the entire survey. Details such as time, date, site, GPS location, target species, survey type, surveyors names and other relevant information should be spoken into the recording device by the surveyor at the beginning of the survey.



A recording of the owls territorial call is played with a MP3 player and broadcast megaphone. The broadcast call is followed by a silent listening period during which, if an owl is present and calls back, it can be recorded on the device.



*Photos: (from top to bottom) masked owl, sooty owl and powerful owl.*

Spotlighting can be carried out during the silent listening period to search the trees for movement, owls can fly into the survey area undetected and may not necessarily call.

For sooty and masked owls the territorial call can be played first, then after the first silent listening period the trilling call of the sooty and the chattering call of the masked owl can be played followed by another silent listening period (see next page for sequence).

Call-playback surveys are best conducted during calm, dry

weather, although they can be conducted during light rain. Once an owl is detected, the playback should be discontinued to allow the owl to resume its normal activities as soon as possible. A compass bearing is taken and distance is estimated to plot the location of the owl.

Powerful Owl calls can be heard during calm, fine weather from 1-2 km away. When sampling extensive areas, it is recommended that sites should be at least 3 km apart.

*Photo (Owen Hanson): A sooty owl in the spotlight in forest earmarked for logging.*



Care must be taken to avoid repeat counts of the same owl from two sites. However, when sampling smaller areas (such as proposed logging coupes), it may be useful to conduct several playback surveys from different parts of the area, especially when complex topography may inhibit detection of calls across ridges or gullies.

Sooty and masked owls can be surveyed for throughout the year, however powerful owls should not be targeted during breeding season from April to September.

In addition to the details aurally recorded on the recording device a data sheet or clear notes detailing time, weather conditions, date, site, GPS location, surveyors names and target species is essential.



If the owl is detected a compass bearing and estimate of distance from the observer must also be recorded.

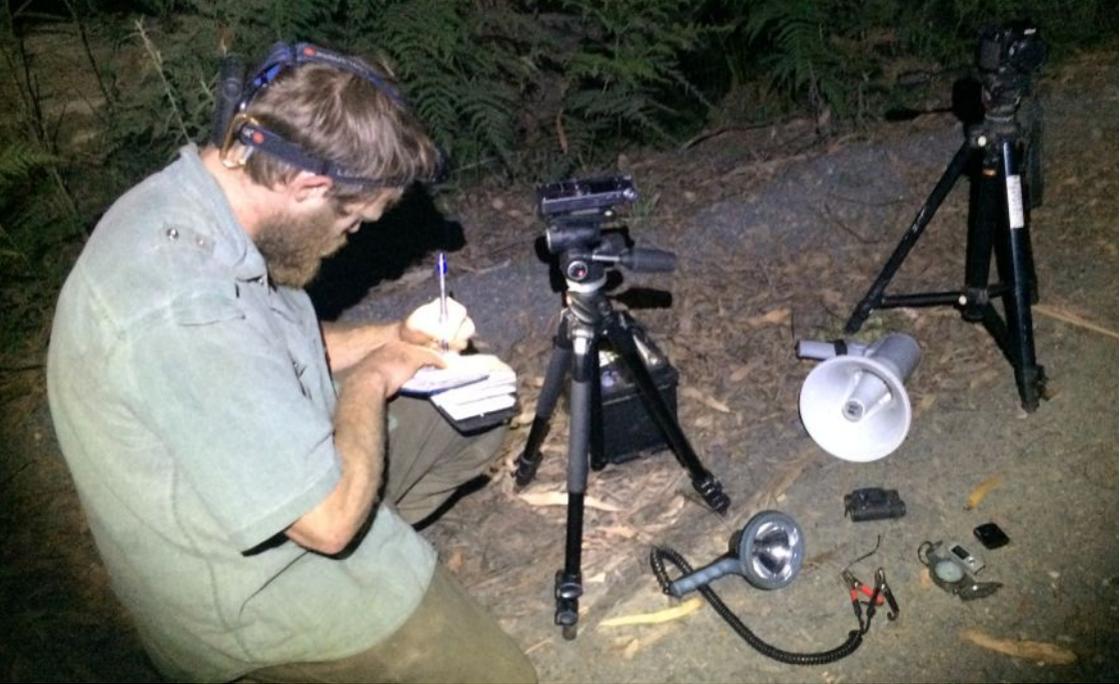
### Multi species large owl playback

Recommended multi species large owl playback sessions comprise the following sequence:

1. Powerful owl - 2 mins
2. Silence - 2 mins
3. Barking owl - 2 mins
4. Silence - 2 mins
5. Southern boobook - 2 mins
6. Silence - 2 mins
7. Sooty owl - 2 mins  
(6 territorial screams at 30 sec intervals)
8. Silence - 2 mins
9. Sooty owl - 1 min (trilling)
10. Silence - 2 mins
11. Masked owl - 2 mins  
(6 territorial screams at 30 sec intervals)
12. Silence - 2 mins
13. Masked owl - 1 min  
(chattering)

In some circumstances the first round of call playbacks may not detect any owls and a second round of call playbacks can be conducted that may be successful.

*Photo (Ed Hill): A sound recorder.*



### Equipment list for owl call-play back surveys

- Broadcast megaphone with line in input
- MP3 player with owl recordings
- Recording device
- Tripod to mount recording device (not essential but handy)
- Camera
- Spotlights/ high powered torches
- GPS Unit
- Compass
- Notebook
- Data sheet
- Binoculars
- Pen/Pencil
- Warm clothing

*Photos: (above) Spotlighting and call-playback equipment (Ed Hill); (right) spotlighting (Raphael Korman)*

Some of the content in this section is from the Department of Environment Land Water and Planning (DELWP) survey standards for large forest owls. These can be found here:

- [http://www.depi.vic.gov.au/\\_\\_data/assets/pdf\\_file/0005/230828/1-Powerful-Owl-Survey-Standards-FINALv1.0\\_2MAY11.pdf](http://www.depi.vic.gov.au/__data/assets/pdf_file/0005/230828/1-Powerful-Owl-Survey-Standards-FINALv1.0_2MAY11.pdf)
- [http://www.depi.vic.gov.au/\\_\\_data/assets/pdf\\_file/0003/230835/5-Masked-Owl-Survey-Standards-FINALv1.0\\_2MAY11.pdf](http://www.depi.vic.gov.au/__data/assets/pdf_file/0003/230835/5-Masked-Owl-Survey-Standards-FINALv1.0_2MAY11.pdf)
- [http://www.depi.vic.gov.au/\\_\\_data/assets/pdf\\_file/0016/230830/3-Sooty-Owl-Survey-Standards-FINALv1.0\\_2MAY11.pdf](http://www.depi.vic.gov.au/__data/assets/pdf_file/0016/230830/3-Sooty-Owl-Survey-Standards-FINALv1.0_2MAY11.pdf)

## What is spotlighting?

Spotlighting is usually conducted along transects, generally 1 km in length, although longer transects may be required in order to accurately determine population densities. Transects can be either along a track, or off track.

If spotlighting off track in the bush it is advisable to check the area in daylight and find the best route in forest that is most conducive to spotlighting. Open forest with clear views up to the canopy will produce the best results; closed forest with a dense understorey that obstructs the view can make the survey difficult.

High powered torches or spotlights are used to locate nocturnal arboreal (tree dwelling) wildlife

in the canopy of the forest. Spotlighting involves shining lights into the canopy searching for animals. Animals are usually first encountered by 'eye shine', when the light from the surveyors spotlight is reflected off the eyes of the animal.

Different animals produce different color eye shine and to the experienced surveyor it is possible to get an idea of what species they are looking at just from the colour of the eye shine and the other features such as the space between the eyes.

Once eyeshine is encountered a closer look at the animal is required. Binoculars are useful to closely see identifiable features.



## Identifiable Features

Identifiable features of commonly encountered arboreal mammals include:

### Greater glider

- Very long bushy tail
- White belly
- Usually not moving very much and will stare back at you with strong golden/orange eye shine

### Yellow-bellied glider

- Smaller than greater glider (body, face and ears)
- Creamy/ yellow belly
- A lot more active than greater glider
- Often facing the trunk of the tree so eye shine is hard to pick up
- Dark dorsal stripe
- Weaker eye shine than greater glider

*Photo: Sugar Gliders*

### Mountain brushtail possum

- Pointier face than greater glider
- Long tail, but not as long as greater glider
- Often very dark (chocolate brown) but also found with grey body and black tail
- Red eyeshine

### Sugar glider

- Smaller than yellow-bellied glider
- Moves quickly often seen darting around canopy
- Small head and face (skull width only 2.5cm)
- Grey, white and black coloring

### Ringtail possum

- Smaller than brushtail possum
- Brown/red coloring on upper body, white under belly
- Skinny tail (ringtail) with white tip (usually 1/3 of tail)

**Note: Never ID on eyeshine alone, use binoculars to obtain visual ID.**



## Equipment list for spotlighting surveys

- Handheld spotlights (12 Volt battery powered)
- High powered head torch (LED Lenser)
- Compass
- GPS Unit
- Binoculars
- Camera
- Broadcast megaphone and Mp3 player (if targeting yellow-bellied gliders)
- Sound recording device (if targeting yellow-bellied gliders)
- Note book / Data Sheet
- Pencil/ Pen
- Warm clothing

## You've found an animal and identified it, now what?

Once an animal is located and identified along a transect the time of the observation and the species should be recorded first. The location of the animal should be estimated by recording the observers position on a GPS unit and estimating the perpendicular distance to the glider.

*Photos (Ed Hill): (top to bottom: yellow-bellied glider, brushtail possum and ringtail possum.*



A compass bearing of the direction the animal is located from the observers position should be taken and recorded in a data sheet. A record of the type of observation should also be noted, visual or aural.

Greater gliders will always be visually observed as they do not call, however yellow-bellied gliders will often be heard but not seen so their presence will be recorded as aural detection's.

The cumulative number of animals should be recorded so the surveyor can easily keep track of how many individuals of a given species they have observed along the transect.

If possible, photograph the animal. A zoom lens will be required but even some small hand held digital cameras can take surprisingly good shots. Photos can be very useful records and they don't have to be high quality, just clear enough to identify the species.

### Greater glider spotlighting

In East Gippsland greater gliders are protected when found in large numbers. Management actions for protected species are written into the Planning Standards for Timber Harvesting Operations in Victoria's State Forests 2014.

*Table: Sample data sheet of observation records. Photo: (right) greater glider (Andy Caller).*

Time	Species	Distance	Direction	GPS location	Observation	Cumulative number
10:45 pm	greater glider (GG)	20m	80°	55H 646154 5869277	Visual	1
10:58pm	ringtail possum (RTP)	10m	50°	55H 646154 5869357	Visual	1
11:10 pm	yellow-bellied glider (YBG)	40m	120°	55H 646154 5869559	Aural	1
11:16pm	GG	15m	40°	55H 646154 5869666	Visual	2
11:30pm	GG	25m	75°	55H 646154 5869767	Visual	3

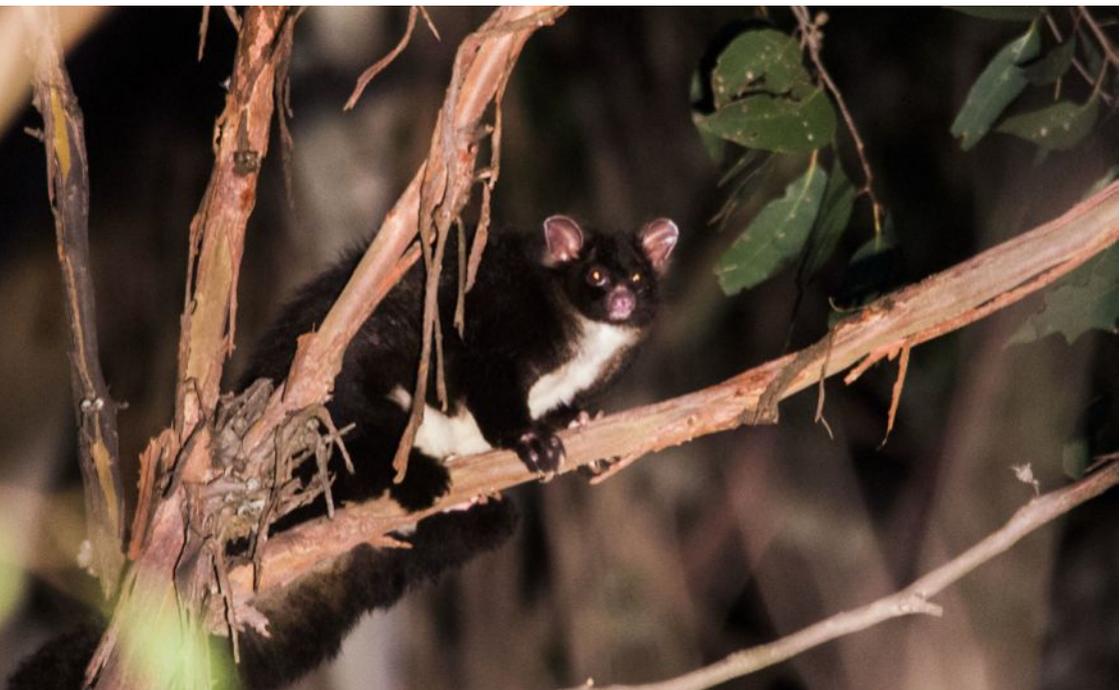
The zoning management actions for greater gliders in East Gippsland contained within the Planning Standards are as follows:

*“Establish a Special Protection Zone of approximately 100 ha of suitable habitat where verified records report more than 2 individuals per hectare, more than 10 individuals per km or more than 15 individuals per hour of spotlighting, or where substantial populations are located in isolated or unusual habitat.*

When spotlighting for greater gliders transects should be conducted well after dark, as greater gliders may not emerge from their

hollows as early as other species. Generally the transects should be conducted in the first half of the night as little is known about when they return to their hollows before dawn.

Greater gliders can remain relatively stationary for long periods and have a propensity to stare at intruders. These characteristics, along with their bright eye-shine make them relatively easy to detect. However, despite this, greater gliders can at times be inconspicuous and overlooked, especially by inexperienced observers.



In addition, spotlighting generally underestimates population sizes of greater gliders since not all individuals that occur at a site will be detected during surveys.

To determine the likelihood of detecting greater gliders at occupied sites, Wintle *et al.* (2005) calculated detection probability using spotlight surveys in wet and dry sclerophyll forests near Eden, south-eastern New South Wales. Single visit detection probabilities over a 40 min / 2 hectare area for Greater Glider ranged from 10 – 70% depending on the environmental conditions, particularly temperature and habitat quality. Under average environmental conditions five visits were needed to yield a detection probability of about 90% (Wintle *et al.* 2005)<sup>1</sup>

Where greater glider surveys are conducted under optimal conditions (high habitat quality, warm temperatures with no rain, fog or bright moonlight) a minimum of 2 repeat visits is recommended for a 40 min / 2 hectare transect.

In areas containing lower quality habitat (fewer hollow bearing trees) and/or under colder temperatures, five or more repeat visits of the 40 min / 2 ha transect are needed to provide an equivalent probability of detection of greater gliders.

### Yellow-bellied glider spotlighting and call playback

The yellow-bellied glider is a medium-sized, highly mobile, hollow-dependent species found in open forest and woodlands. In Victoria, the yellow-bellied glider strongholds are the continuous forests of East Gippsland.

One of their preferred foods is the sap of large Eucalypts trees. V-shaped incisions in the bark of large eucalypts are a classic sign of the presence of yellow-bellied gliders.

The zoning management actions for yellow bellied gliders in East Gippsland contained within the Planning Standards are as follows:

Some information in this section is taken from DELWP's survey standard for greater gliders. This document contains information about what evidence is required when submitting records to DELWP.

[http://www.depi.vic.gov.au/\\_\\_data/assets/pdf\\_file/0007/230839/8-Greater-Glider-Survey-Standards-FINALv1.0\\_2MAY11.pdf](http://www.depi.vic.gov.au/__data/assets/pdf_file/0007/230839/8-Greater-Glider-Survey-Standards-FINALv1.0_2MAY11.pdf)

<sup>1</sup>Wintle, B.A., Kavanagh, R.P., McCarthy, M.A., and Burgman, M.A. (2005). Estimating and dealing with detectability in occupancy surveys for forest owls and arboreal marsupials. *Journal of Wildlife Management* 69: 905-917

*Establish a Special Protection Zone of approximately 100 ha of suitable habitat where verified records report more than 0.2 individuals per hectare, more than 5 individuals per km or more than 7 individuals per hour of spotlighting, or where substantial populations are located in isolated or unusual habitat.*

Yellow-bellied gliders are most easily identified and observed by their distinctive screech. Spotlighting transects for yellow-bellied gliders can successfully produce visual records of the species, however aural records are common.

Spotlighting for yellow-bellied gliders should be combined with call-playback using a mega phone to broadcast the pre recorded sound of a yellow-bellied glider or a predator such as the powerful owl to provoke a response. Owl and glider calls can be played from Ed Mc Nabb's Nightlife of Australia South-eastern Forests, audio recordings.

Surveys have successfully detected yellow-bellied gliders with call playback broadcasts of the powerful owl at 200m intervals along a 1km spotlighting transect.

The observer should begin each survey with a 10-minute listening period and record any observations. This should be followed by a call-playback sessions of pre-recorded calls, conducted at intervals of 200m along the transect.

A typical call sequence comprises a 3-minute broadcast of yellow-bellied glider calls, followed by a 2-minute listening period, then a 3-minute broadcast of powerful owl calls to elicit a response again followed by 2-minute listening period.

*Photo: Yellow-bellied glider feed tree indicating the presence of these gliders.*



Each call-playback should be recorded using a sound recording device. The surveyor should speak into the device at the beginning of each recording stating the time, date, site, GPS location, survey type, call playback broadcast number and any other relevant details.

The recording device should then be left running to record the call-playback broadcast and then left running to record any responses.

Some information in this section of the manual is from DELWP's survey standard for Yellow Bellied Gliders that can be accessed here:

[http://www.depi.vic.gov.au/\\_\\_data/assets/pdf\\_file/0004/230836/6-Yellow-bellied-Glider-Survey-Standards-FINALv1.0\\_2MAY11.pdf](http://www.depi.vic.gov.au/__data/assets/pdf_file/0004/230836/6-Yellow-bellied-Glider-Survey-Standards-FINALv1.0_2MAY11.pdf)

*Photo opposite page (Owen Hanson): Eastern pygmy possum.*

*Photos next page: Fauna in the spotlight: what to look for when you're spotlighting. All photos by Ed Hill unless otherwise stated.*

*Left to right top to bottom - Greater glider, Yellow-bellied glider, Yellow-bellied glider, Sooty owl (Owen Hanson), Sooty owl (Owen Hanson), Southern Boobook, Yellow-bellied glider, Greater gliders, Greater Glider.*

*Photo back cover (Rob Blakers) Kuark forest.*







